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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,203	01/12/2001	Kazuaki Kinjyou	Q62634	8552
7590	12/24/2003		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213			WILLIAMS, KEVIN D	
		ART UNIT	PAPER NUMBER	
		2854		

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/758,203	KINYOU, KAZUAKI	
	Examiner	Art Unit	MW
	Kevin D. Williams	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 October 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 02 May 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) Other: *Sone, marked-up fig. 6b.*

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Applicant's originally filed application referred to the rounded portions of the removing claw as being "chamfered." Applicant has now amended the claims to refer to these features as being "rounded." The specification still refers to these features using the term "chamfered." Applicant should amend the specification to use the "rounded" language in order to be consistent with the claims. Appropriate correction is required.

Claim Objections

2. Claims 1-7 are objected to because of the following informalities:

In claim 1, line 12, claim 4, line 8, and claim 7, lines 13 and 15, the limitation "the rounded portions" lacks proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 4, applicant claims "a removing claw having an upper face." In claims 2 and 5, applicant claims "the upper face of the tip." There appears to be a lack of proper antecedent basis for "the upper face of the tip" recited in claims 2 and 5 and it is unclear whether applicant is referring to the same upper face recited earlier in claims 1 and 4.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA) in view of Sone (US 4,447,054).

Applicant's admitted prior art teaches a recording apparatus comprising removing means for removing a recording medium from the medium fixing member, a thin film toner sheet, said recording medium being fixed to a medium fixing member such that an active surface of the recording medium is facing to the medium fixing member, the removing means having a removing claw, the removing claw having an upper face (Fig. 7b) that is operative to contact the recording medium, side faces (Fig. 7a) respectively having a height reduced toward a tip (specification pgs. 1-10, figures 2, 3, 4, 5, 7).

With respect to claim 7, AAPA teaches a recording method comprising the steps of fixing an image receiving sheet onto the medium fixing member, said image receiving sheet having an image receiving layer to receive an image of a recorded image, fixing

the toner sheet onto the image receiving sheet, and removing the toner sheet or the image sheet from the medium fixing member.

Applicant's admitted prior art does not teach portions joining the upper face and the side faces respectively being rounded and extending along the length of the side faces, a non-curvilinear portion being provided between the rounded portions, and the rounded portion having a radius of curvature of $r=1$ mm or more and an upper face of the tip having a face pressure of 1 Kpa or less received from the recording medium being removed.

Sone teaches a recording apparatus with a removing claw 1 having portions joining the upper face (noted in Fig. 6b) and the side faces (noted in Fig. B) respectively being rounded and extending along the length of the side faces, a non-curvilinear portion being provided between the rounded portions (upper face;Fig. 6b).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify AAPA to have the rounded portions as taught by Sone, in order to prevent damage to the recording medium, the toner sheet, and the fixing member.

It also would have been obvious to modify AAPA to have the rounded portion having a radius of curvature of $r=1$ mm or more and an upper face of the tip having a face pressure of 1 Kpa or less received from the recording medium being removed, as it is obvious to modify a particular feature of a device to a specific degree according to the particular device and operation at hand. "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." MPEP 2144.05 (II)(A). For example, since Sone teaches

a radius of curvature, it would be obvious to modify that radius of curvature according to the overall size of the removing claw.

Response to Arguments

7. Applicant's arguments filed 10/16/2003 have been fully considered but they are not persuasive.

Applicant argues that the examiner's rejection based on the combination of AAPA and Sone modifies AAPA by adding the arrowhead-shaped portion of Sone to AAPA. This is not the modification of AAPA that the examiner is relying upon. As described in the above rejection, AAPA teaches an upper face and side faces that are respectively joined to the upper face. The portions that join the side faces to the upper face are not rounded in AAPA. Sone also teaches a removing claw having an upper face and side faces that are respectively joined to the upper face. Sone discloses rounded portions joining the side faces to the upper face. In the rejection combining AAPA with Sone, the examiner is only modifying AAPA to replace the unrounded portions joining the side faces to the upper face with rounded portions as taught by Sone.

Applicant argues that a particular parameter must first be recognized as a result effective variable before the determination of the optimum or workable ranges of the variable might be characterized as routine experimentation. Applicant further argues that the prior art does not recognize the radius of curvature and the face pressure as result-effective variables. Sone discloses several embodiments of the removing claw,

including the removing claws disclosed in figures 1, 6a, and 6b. The removing claws disclosed in figures 6a and 6b each have rounded portions having different radii of curvature. The surface area of the claw that contacts the sheet in figure 6a is also different from the surface area of the claw that contacts the sheet in figure 6b. The size of the contact surface area is directly proportional to the face pressure exerted on the claw by the sheet. Sone's recognition that the radius of curvature and the contact surface area are result-effective variables is evidenced by his disclosure of embodiments that vary the radius of curvature and the contact surface area. It is unlikely that Sone would disclose embodiments varying these variables if there were no advantages to be gained from the particular embodiments disclosed. Therefore, the prior art, namely Sone, does recognize the radius of curvature and the face pressure as result-effective variables.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (703) 305-3036. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

KDW
December 21, 2003

Kevin D. Williams
Andrew H. Hirshfeld
Primary Examiner
Tech Center 2800

FIG. 4a

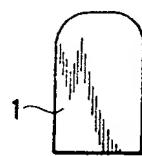


FIG. 4b

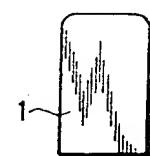


FIG. 5a

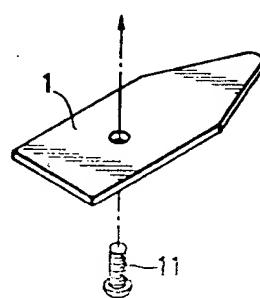


FIG. 5b

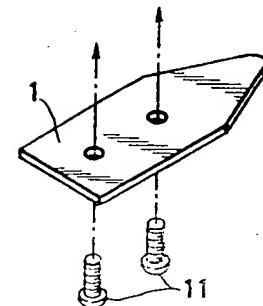
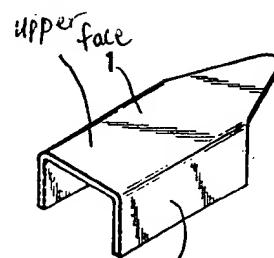
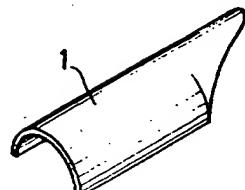


FIG. 6a



Side Face